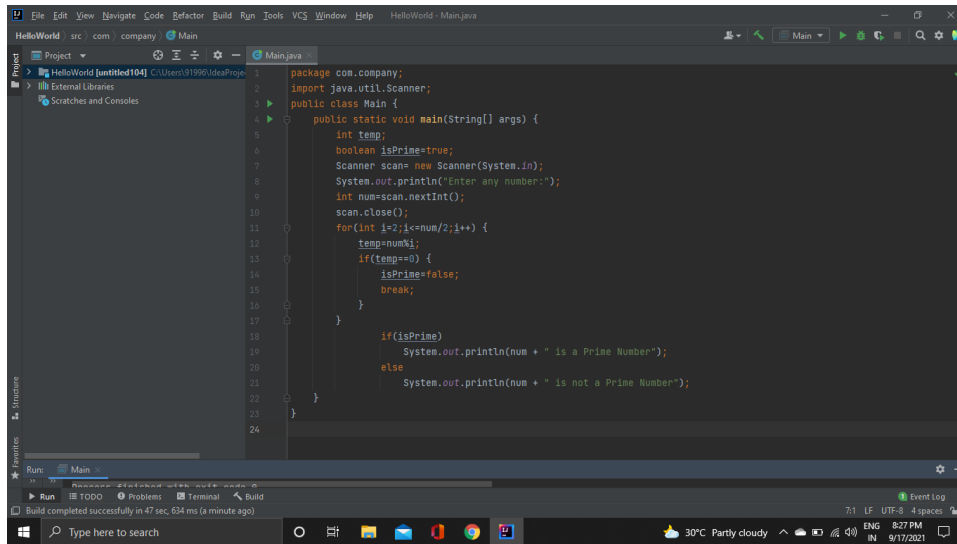
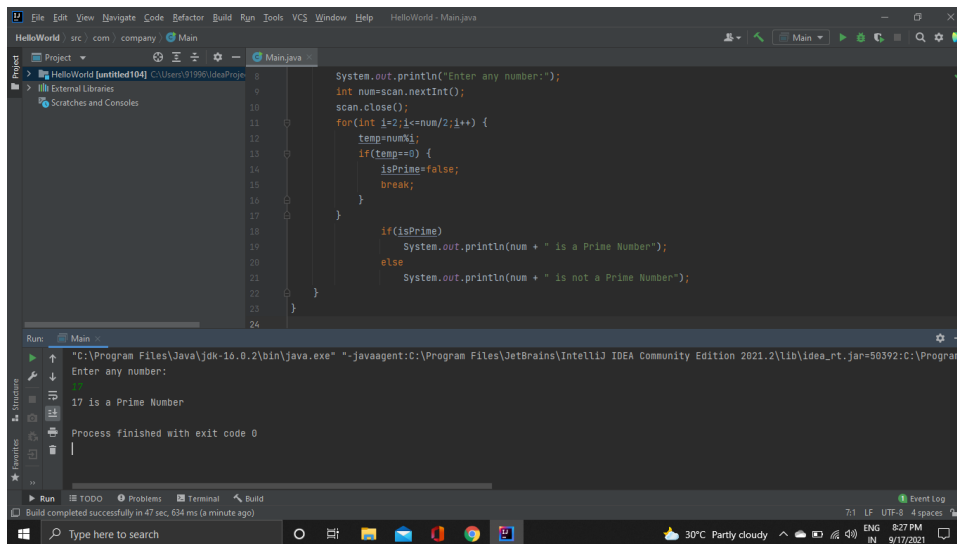


PROGRAM : 1



```
1 package com.company;
2 import java.util.Scanner;
3 public class Main {
4     public static void main(String[] args) {
5         int temp;
6         boolean isPrime=true;
7         Scanner scan= new Scanner(System.in);
8         System.out.println("Enter any number:");
9         int num=scan.nextInt();
10        scan.close();
11        for(int i=2;i<=num/2;i++) {
12            temp=num%i;
13            if(temp==0) {
14                isPrime=false;
15                break;
16            }
17        }
18        if(isPrime)
19            System.out.println(num + " is a Prime Number");
20        else
21            System.out.println(num + " is not a Prime Number");
22    }
23 }
24
```

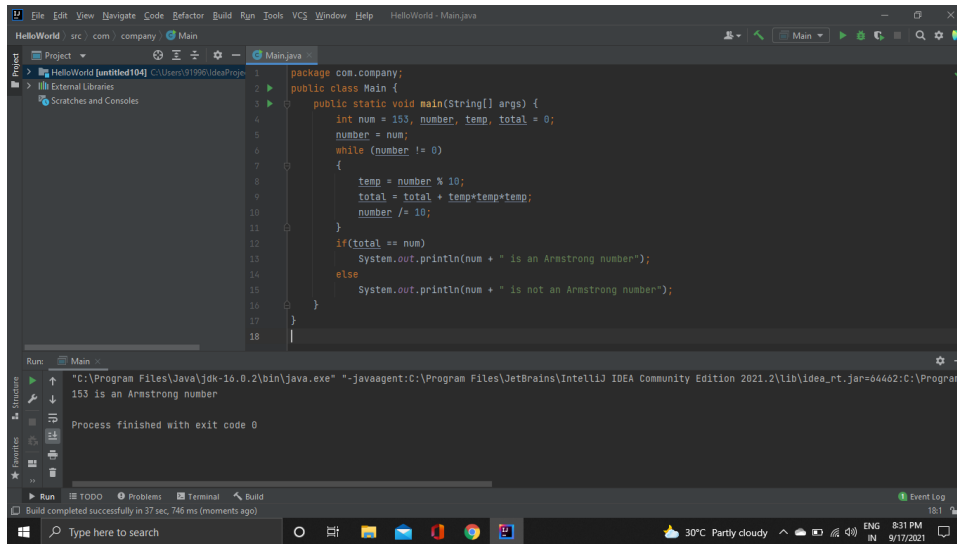
The screenshot shows the IntelliJ IDEA IDE with a project named 'HelloWorld'. The 'Main.java' file is open, displaying the source code for a Java program that checks if a number is prime. The code uses a Scanner to take input from the user and a for loop to check for divisibility. The output window at the bottom shows the program has run successfully.



```
Run: Main
C:\Program Files\Java\jdk-16.0.2\bin\java.exe -javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=50392:C:\Program
Enter any number:
17
17 is a Prime Number
Process finished with exit code 0
```

The screenshot shows the IntelliJ IDEA IDE with the same project. The 'Main.java' file is open, and the 'Run' window at the bottom shows the execution output. The program has run successfully, and the output is displayed in the Run window. The output shows that the number 17 is a prime number.

PROGRAM : 2



```
1 package com.company;
2 public class Main {
3     public static void main(String[] args) {
4         int num = 153, number, temp, total = 0;
5         number = num;
6         while (number != 0)
7         {
8             temp = number % 10;
9             total = total + temp*temp*temp;
10            number /= 10;
11        }
12        if (total == num)
13            System.out.println(num + " is an Armstrong number");
14        else
15            System.out.println(num + " is not an Armstrong number");
16    }
17 }
18
```

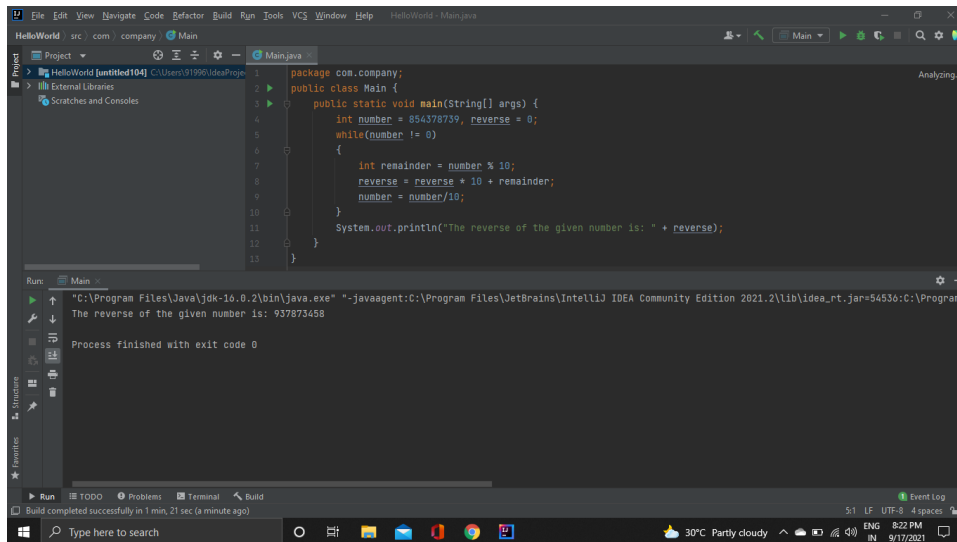
Run: Main

"C:\Program Files\Java\jdk-10.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=64462:C:\Program Files\Java\jdk-10.0.2\bin" 153 is an Armstrong number

Process finished with exit code 0

Build completed successfully in 37 sec, 748 ms (moments ago)

PROGRAM : 3



```
1 package com.company;
2 public class Main {
3     public static void main(String[] args) {
4         int number = 854378739, reverse = 0;
5         while (number != 0)
6         {
7             int remainder = number % 10;
8             reverse = reverse * 10 + remainder;
9             number = number / 10;
10        }
11        System.out.println("The reverse of the given number is: " + reverse);
12    }
13 }
14
```

Run: Main

"C:\Program Files\Java\jdk-10.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2021.2\lib\idea_rt.jar=54536:C:\Program Files\Java\jdk-10.0.2\bin" The reverse of the given number is: 937873458

Process finished with exit code 0

Build completed successfully in 1 min, 21 sec (a minute ago)